AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated in the following listing of all claims:

1. (***Cancelled***)

2. (***Cancelled***)

3. (Previously presented) A system for measuring a property at a surface, the system comprising:

a plurality of survey probes, each having a unique identifier; and

a survey controller configured to automatically poll the survey probes to obtain respective identifiers and determine a relative order of the probes,

each survey probe configured to:

disconnect a downstream neighbor survey probe and enter an idle state;

report its unique identifier to the survey controller if in the idle state and in response to a polling command from the survey controller; and

change to a state other than the idle state after reporting its unique identifier.

4. (Previously presented) The system of claim 3, the survey controller configured to assign and transmit a different, unique identifier to each survey probe.

5. (***Cancelled***)

6. (Previously presented) The system of claim 3, the survey controller and survey probes being connected by a first number of conductors, the survey probes being configured to perform a second number of simultaneous measurements of the surface, and the second number greater than, and not limited by, the first number.

7. (Previously presented) The system of claim 3, the survey controller being remotely accessible through a computer network for remote control of the survey controller and the survey probes.

8. (Previously presented) The system of claim 3, the survey probes being connected to the survey controller through three conductors, two conductors supplying power and a third conductor acting as a communications bus.

9. (***Cancelled***)

10. (***Cancelled***)

11. (***Cancelled***)

12. (***Cancelled***)

13. (Previously presented) The system of claim 3,
wherein the survey controller is configured to individually program plural of the survey probes to inject current into the surface simultaneously or according to a programmed timing scheme.

14. (***Cancelled***)

15. (Previously presented) The system of claim 3,
wherein the survey controller is configured to individually program respective ones of the survey probes to acquire geophysical data according to a programmed timing scheme.

16. (***Cancelled***)

17. (***Cancelled***)

18. (***Cancelled***)

19. (***Cancelled***)

20. (***Cancelled***)

21. (***Cancelled***)

22. (***Cancelled***)

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38. (***Cancelled***)

39. (***Cancelled***)

40. (***Cancelled***)

41. (***Cancelled***)

42. (***Cancelled***)

43. (***Cancelled***)

44. (***Cancelled***)

45. (***Cancelled***)

46. (***Cancelled***)

47. (Previously presented) A system for acquiring geophysical data based on measurements taken using survey probes, the system comprising:

a plurality of the survey probes, each having a unique identifier and each including data acquisition circuits and storage for measurements acquired thereby, the storage buffering the acquired measurements for subsequent, post-measurement transfer via a data communication interface; and

a survey controller communicatively coupled to receive from each of the survey probes its respective unique identifier, to automatically determine at least a relative ordering of the survey probes with respect to each other and to thereafter command individual ones of the survey probes based, at least in part, on the automatically determined relative ordering.

48. (Previously presented) The system of claim 47,

wherein the survey probes are configured to isolate themselves from an external power supply connection, and to instead operate from an internal power source, for a period during which the respective survey probe collects geophysical data.

49. (Previously presented) The system of claim 47,

wherein the relative ordering includes positional ordering, and

wherein each of the survey probes includes a radio frequency identification (RFID) transponder including memory for receiving positional information from a Global Positioning System (GPS) receiver proximate thereto, the survey probes configured to supply the survey controller with the received positional information in association with the respective unique identifier.

50. (Previously presented) The system of claim 47, wherein the system determines relative ordering based on a startup sequence that includes:

each survey probe disconnecting its downstream neighbor and entering an idle state;

in response to a poll received from the survey controller while in the idle state, each survey probe reporting its unique identifier; and

thereafter, a reporting one of the survey probes changing to a state other than the idle state and reconnecting its downstream neighbor, if any, for subsequent polling by, and reporting to, the survey controller.

51. (Previously presented) A method for performing geophysical measurements, the method comprising:

obtaining a unique identifier from each of plurality of survey probes placed at a surface;

automatically determining a relative position of each of the survey probes as placed;

commanding individual ones of the survey probes using the obtained unique identifiers and based on the determined relative positions thereof;

collecting geophysical data using the survey probes; and

storing the geophysical data in digital form at the respective survey probes for later transmission to a survey controller.

52. (Previously presented) The method of claim 51, wherein the survey probes are connected to the survey controller by one or more conductors that supply power, the method further comprising:

automatically disconnecting individual ones of the survey probes from at least the power supply conductors for a period that, for the respective survey probe, includes the collecting of geophysical data; and

operating the survey probes when disconnected using an internal source of power to reduce noise.

53. (Previously presented) The method of claim 51, wherein the relative position is determined by the survey controller based on a startup protocol that includes:

each survey probe disconnecting its downstream neighbor and entering an idle state;

in response to a poll received from the survey controller while in the idle state, each survey probe reporting its unique identifier; and

thereafter, a reporting one of the survey probes changing to a state other than the idle state and reconnecting its downstream neighbor, if any, for subsequent polling by, and reporting to, the survey controller.

54. (Previously presented) The method of claim 51, further comprising:

determining the relative positions of the survey probes using a radio frequency identification (RFID) transponder to uniquely identify each respective survey probe and a portable Global Positioning System (GPS) receiver to determine coordinates of a uniquely identified survey probe proximate thereto,

associating coordinates determined by the GPS receiver with the identifying information for the proximate survey probe.

55. (Previously presented) The method of claim 51, wherein the survey controller and survey probes are connected by a first number of conductors, the method further comprising:

performing a second number of simultaneous measurements with the survey probes, the second number greater than, and not limited by, the first number.

56. (Previously presented) The method of claim 51, further comprising:

performing both seismic and electrical resistivity measurements using the same survey probes.

57. (***Cancelled***)

58. (***Cancelled***)